REMARKS

Applicants appreciate the Examiner's thorough review of the present application, and respectfully request reconsideration in light of the preceding amendments and the following remarks.

Claims 1-16 are pending in the application. Claims 1, 11-14 have been amended. Claim 16 has been added to provide Applicants with the scope of protection to which they are believed entitled.

Applicants note the Examiner's withdrawal of previous rejections in favor of new grounds of rejection. Claims 1-5 and 9-15 are now rejected under 35 U.S.C. 103(a) as being unpatentable over Culbert, previously applied as a teaching reference, in view of Sumimoto, previously applied as a primary reference. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Culbert in view of Sumimoto and further in view of Hauser, also previously applied. Applicants respectfully traverse these rejections because, at least, there is no suggestion or motivation to combine teachings of Culbert and Sumimoto.

The Examiner stated that Culbert discloses a method for allocating resources on **a computer**. The Examiner further noted that Sumimoto discloses a system for managing resource allocation for processes distributed across a network or **multiple computers**. The Examiner then alleged that it would have been obvious to use the resource allocation schema taught by Culbert for processes and resources distributed throughout a network as taught by Sumimoto. Such language is merely a statement that the references can be modified, which Appelant contends to the contrary, and **does not state any desirability for making the modification**. It is clear that the Examiner is relying upon impermissible hindsight to choose an pick from the references only the teachings which support the assertion that the claimed invention is obvious. Absent some actual suggestion or motivation, the references are not properly combinable to render the claimed invention obvious.

In order to combine the references in the manner proposed by the Examiner, there must be some teaching, e.g., that the single-computer resource allocation schema of the type taught by Culbert is also suitable to manage computer resources across a network. The Examiner did not

specify if such or similar teachings are found in the references themselves or in the knowledge available to people of ordinary skill in the art. Absent such or similar teachings, a person of ordinary skill in the art would have been motivated, at best, to provide each individual computer in the Sumimoto network with a separate resource allocation schema of the Culbert type. Then, in the case of degradation, each individual computer which experiences insufficient resource problems would have managed to redistribute its own internal resources, as taught by Culbert, instead of redistributing computer resources on the network, as recited in e.g. claim 1.

Accordingly, Applicant respectfully submits that Culbert and Sumimoto are not combinable, and even if they are, the references are not combinable in any manner that could teach or disclose all limitations of the claimed invention. A prima facie case of obviousness has not been established by the Examiner. The 35 U.S.C. 103(a) rejections as to claims 1-15 should therefore be withdrawn.

Notwithstanding the above, Applicants have amended claims 1 and 11-14 solely for the purpose of accelerating prosecution.

Amended claim 1 now requires that the minimum resource allocation for the first process be **guaranteed** should insufficient network resources be available. In contrast, in the event of degradation in the Culbert system, a **request for additional resources could be denied** to maintain global optimization of the whole computer system. *See* col. 11 lines 51-52 of Culbert. Thus, if an amount of computer resources allocated to a high-priority process for any reason, e.g. because of failure, drops below a minimum level, a request for additional resources to fulfil the insufficient amount could still be denied. In the Culbert management system, the minimum requirement of computer resources for the high-priority process to run properly is not guaranteed.

Claims 11-13 have been amended in the same manner as claim 1.

Claim 14 has been amended to recite that the redistributing step is performed by removing an amount of computer resources previously assigned to the second process, and reallocating the removed amount of computer resources to the first process **irrespective of computer resources necessary for the second process to run** on the computer network. In contrast, in the event of

degradation, the Culbert system queries each task to learn what resources the task would provide to the system if were asked for. *See* col. 10 lines 59-60 of Culbert. Based upon the task's answers (col. 10 line 63 through col. 11 line 6), the Culbert system will compute an optimal system utilization score. Thus, in the Culbert system, even if an amount of resources is to be removed from a low-priority process to a higher-priority process, the resource requirement of the low-priority process cannot be disregarded (query), and it appears that the removed amount must not affect the resource requirement of the low-priority process (answers).

For any of the above reasons, Applicants respectfully submit that claims 1-15 are patentable over the applied art of record.

New claim 16 finds solid support in the specification, especially the working example described in pages 12-13, and Fig. 5. New claim 16 is patentable not only for the reason advanced with respect to claim 1 but also on its own merit since claim 16 recites other features of the invention neither disclosed, taught nor suggested by the applied art.

Each of the Examiner's rejections has been traversed. All claims are now in condition for allowance. Early and favorable indication of allowance is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any access fees to such deposit account.

Respectfully submitted,

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MARKED-UP VERSION SHOWING CHANGES MADE

IN THE CLAIMS:

Please amend claims 1 and 11-14 as follows:

1. (Twice Amended) A method of allocating network resources on a computer network, comprising:

monitoring at least two nodes on the computer network among at least a first process and a second process for allocation of computer resources on each of the at least two nodes;

assigning a priority to each of the at least two processes, the second process being assigned a lower priority than the first process;

for the first process running on at least one of the two nodes, setting a minimum resource allocation for the first process on the at least two nodes independent of the computer resources needed by other processes running on the computer network; and

redistributing computer resources on the network so that the minimum resource allocation for the first process is guaranteed should insufficient network resources be available.

11. (Three Times Amended) An article, comprising:

at least one sequence of machine executable instructions in machine readable form,

wherein execution of the instructions by one or more processors causes the one or more processors to:

(i) monitor at least two nodes on the computer network among at least two processes for allocation of computer resources on each of the at least two nodes;

(ii) assigning a priority to each of the at least two processes, the second process being assigned a lower priority than the first process;

(iii) for a first process of the at least two processes running on at least one of the two nodes, set a minimum resource allocation for the first process on the at least two nodes irrespective of the computer resources needed by other processes running on the computer network; and

(iv) redistributing computer resources on the network so that the minimum resource allocation for the first process is guaranteed should insufficient network resources be available.

12. (Twice Amended) A computer architecture for switching resource allocation policies on a computer network, comprising:

monitoring means for monitoring at least two nodes on the computer network among at least a first and a second process for allocation of computer resources on each of the at least two nodes;

assigning means for assigning a priority to each of the at least two processes, the second process being assigned a lower priority than the first process;

for the first process running on at least one of the two nodes, setting means for setting a minimum resource allocation for the first process on the at least two nodes independent of the computer resources needed by other processes running on the computer network; and

redistributing means for redistributing computer resources on the network so that the minimum resource allocation for the first process is guaranteed should insufficient network resources be available.

13. (Twice Amended) A computer system comprising:

a processor; and

a memory coupled to said processor, the memory having stored therein sequences of instructions, which, when executed by said processor, cause said processor to perform the steps of:

monitoring at least two nodes on the computer network among at least a first process and a second process for allocation of computer resources on each of the at least two nodes;

assigning a priority to each of the at least two processes, the second process being assigned a lower priority than the first process;

for the first process running on at least one of the two nodes, setting a minimum resource allocation for the first process on the at least two nodes independent of the computer resources needed by other processes running on the computer network; and

redistributing computer resources on the network so that the minimum resource allocation for the first process is guaranteed should insufficient network resources be available.

14. (Amended) The method of claim 1, wherein said redistributing step is performed by removing a computer resource previously assigned to the second process, and reallocating the removed computer resource to the first process irrespective of an amount of computer resources necessary for the second process to run on the computer network.